

Abstract

A control system is provided for controlling the fueling system (402) of a combustion engine. The control system includes a sensing arrangement for measuring a plurality of engine and vehicle conditions (404, 406, 408, 410, 412) in real time. The control system also includes a fuel map that defines engine fueling parameters corresponding to engine operating conditions. The control system also includes a control module (102) that determines engine load from the sensed conditions, and controls the fueling parameters of the fueling system for optimized fuel consumption by selecting fueling parameters from the fuel map based on current engine load.